

REMARKS

Claims 1-8, 21-30 and 53-54 are currently pending. Claims 9-20 and 31-52 have been cancelled as being drawn to non-elected inventions. No new matter has been introduced by these amendments.

A. Rejection of Claims 1-8 and 53

Claims 1-8 and 53 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious in view of U.S. Patent No. 6,187,424 to Kjellqvist *et al.* In particular, the Examiner contends that the claimed limitation of a polymer component comprising at least 80% by weight of one homogenously branched ethylene polymer is obvious in the absence of Applicant's showing of some criticality for the claimed range. Applicant respectfully disagrees.

Kjellqvist is directed to a sheet material comprising a polymer mixture and an optional filler dispersed with a compatibilizer in the polymer mixture. See for example, the Summary of the Invention, Col. 2, lines 36-59. The polymer mixture is comprised of at least one polymer A and one polymer B, and optionally a third polymer C. To that end, Kjellqvist makes clear that none of polymers A, B, or C can be present in any amount exceeding 75 weight percent of the polymer mixture. More specifically, the weight ratio of the required polymer B to the total amount of required polymer A and any optional polymer C is at least 0.5. Col. 2, lines 60-62. Thus, the weight ratio of polymer B to the total of polymers A and C is at least 1:2. When expressed in terms of weight percentage, polymer B therefore represents at least a third or 33.3 weight % of the total polymer mixture. Similarly, the total weight percentage of polymer A and any optional polymer C is at least 25 weight % of the polymer mixture. Col. 2 lines 64-67. Therefore, it necessarily follows that Polymer B cannot exceed 75 weight % of the polymer mixture and must therefore be present in the range of from at least 33.3 weight % up to a maximum of 75 weight %. Likewise, since Polymer B is present in an amount of at least 33.3 weight % of the polymer mixture, the total weight percentage of polymers A and

any optional polymer C cannot exceed 66.6 weight % and must therefore be present in the range of from 25 weight % to a maximum of 66.7 weight %.

Notwithstanding this express teaching that none of polymers A, B, or C can be present in any amount exceeding 75 weight %, the Examiner contends that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the composition of Kjellqvist to comprise at least 80 weight % of one homogeneously branched ethylene polymer as claimed. This however is merely a conclusory statement which finds no support in the teachings of Kjellqvist. The Examiner has offered no objective reasoning as to why a skilled artisan would deviate from the express teachings of Kjellqvist in order to provide a composition having at least 80 weight % of one homogeneously branched ethylene polymer. Further, even if one of ordinary skill in the art would have been motivated to modify the composition of Kjellqvist to include at least 80 weight % of one homogeneously branched ethylene polymer, the Examiner has not provided any explanation as to how the remaining components of Kjellqvist's composition must also be modified. In other words, to increase the maximum weight percentage of polymer B from 75 weight % up to at least 80 weight % would require a corresponding at least 5 weight % decrease in the relative weight percentages of one or more of polymers A and C. The Examiner has similarly failed to identify any teaching or suggestion that would provide a skilled artisan with guidance as to how this corresponding decrease could be achieved. For example, in a composition of Kjellqvist comprising both polymers A and C, there would be no guidance as to whether the corresponding 5 weight % decrease is provided by a reduction in polymer A, polymer C, or some combination of both. Moreover, there similarly is no teaching or suggestion that would indicate such a proposed modification could still yield a composition suitable for the purposes disclosed in Kjellqvist.

To support the alleged obviousness of the claimed range of at least 80 weight %, the Examiner has merely relied upon section 2144.05 of the M.P.E.P. and its guidance with respect to claimed ranges that overlap or lie inside ranges disclosed by the prior art.

Specifically, the Examiner has relied upon the holdings from *In re Woodruff*, *In re Geisler*, and *Titanium Metals Corp. of America v. Banner*. However, as set forth below, the facts surrounding these three Federal Circuit opinions bear no relevance to the facts of the instant claims and do not support a finding of obviousness in this case.

1. *In re Woodruff*

Initially, the Examiner has cited *In re Woodruff*, 16 U.S.P.Q. 2d 1934 (Fed. Cir. 1990) for the notion that absent a showing of criticality, the claimed range is obvious over the teachings of the prior art. In particular, the Examiner has cited the courts statements that the “law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims...In such a situation, the applicant must show that the particular range is *critical*, generally by showing that the claimed range achieves unexpected results relative to the prior art range.” However, the Examiner fails to appreciate that the court in *Woodruff* was evaluating the obviousness between adjacent ranges. Specifically, the court found that a claimed range of greater than 5% was obvious over an adjacent range in the prior art 0-5%. In its reasoning, the court concluded that the scope of the prior art range did allow for concentrations slightly above 5% and therefore overlapped with the claimed range of greater than 5%. Unlike the facts of *Woodruff*, there presently claimed range of at least 80 weight % is not adjacent to the range of *Kjellqvist* and in fact is separated by a gap of at least 5 weight % from the maximum weight percentage allowed under *Kjellqvist*’s teachings. Therefore, even if *Kjellqvist* were entitled to a scope of slightly more than 75%, the result would still not overlap with the claimed range of at least 80%.

2. *In re Geisler*

The Examiner further relies upon the court’s opinion in *In re Geisler*, 43 U.S.P.Q. 2d 1362 (Fed. Cir. 1997) for the notion of what constitutes an adequate level of teaching away. However, the Examiners reliance on *Geisler* is similarly misplaced as the facts in that case again bear no relevance to the instant claims.

In re Geisler is another example where the court was evaluating patentability of a claimed range that was adjacent to and overlapped a range taught by the prior art. Specifically, the claimed range at issue was a layer having a thickness in the range of from 50 to 100 Angstroms. The prior art taught that a similar protective layer should be at least 100 Angstroms thick, and preferably 200 to 300 Angstroms thick. The court concluded that although the prior art expressed a preference for a somewhat thicker protective layer of 200 to 300 Angstroms, at the same time it provided the motivation for one of ordinary skill in the art to focus on thickness levels of about 100 Angstroms which could include and overlap thickness levels below that range. Therefore, the court was not convinced that there was sufficient teaching away from the claimed overlapping range in the art. However, unlike the facts of *Geisler*, there once again is at least a 5 weight % gap between Applicant's claimed range of at least 80 weight % and the maximum 75 weight % allowed under Kjellqvist's teachings. Therefore, even if Kjellqvist would have motivated a skilled artisan to explore polymer mixtures having about 75 weight % of one homogeneously branched ethylene polymer, the holding of *In re Geisler* does not support a finding that the skilled artisan would arrive at polymer mixtures having at least 80 weight % of one homogeneously branched ethylene polymer, as claimed.

3. *Titanium Metals Corp. of America v. Banner.*

Lastly, the Examiner has also drawn support for the instant obviousness rejection from *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775 (Fed. Cir. 1985) where the court found that a *prima facie* case of obviousness can exist where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. In that case, the Court held as proper a rejection of a claim directed to an alloy "having 0.8% nickel, 0.3% molybdenum, up to 0.1% iron, balance titanium" as obvious over a reference disclosing alloys of 0.75% nickel, 0.25% molybdenum, balance titanium and 0.94% nickel, 0.31% molybdenum, balance titanium, respectively. Significantly, the difference between the claimed amounts at issue in that case (0.8% nickel and 0.3% molybdenum) and the corresponding amounts taught in the prior art were 0.05 percent for the nickel component and 0.14

percent and 0.01 percent respectively for the molybdenum components. These relative differences represent miniscule modifications over the amounts taught in the prior art. Whereas, the difference between the instant claimed range of at least 80 weight % and the maximum weight percentage allowed under Kjellqvist is at least 5 weight percent, which difference is many fold greater than the differences scrutinized by the *Titanium Metals* court. Simply put, the facts of *Titanium Metals* do not support a conclusion that a range of at least 80 weight % as claimed is close enough to the prior art range of not more than 75 weight % such that one skilled in the art would have expected them to have the same properties.

B. Rejection of Claims 21- 30 and 54

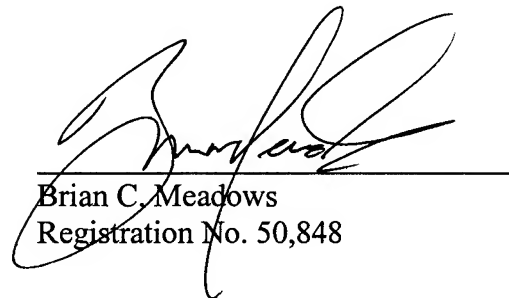
Claims 21-30 and 54 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious in view of U.S. Patent No. 6,187,424 to Kjellqvist *et al.* for the reasons of record as set forth in paragraph 6 of the December 23, 2005 Office Action. While Applicant does not concede or agree with the merits of this rejection, for the reasons set forth above, Applicant respectfully asserts that claim 21 and those claims depending therefrom are in fact non-obvious and patentable over the teachings of Kjellqvist. Claim 21 similarly recites a polymer component comprising at least 80% by weight of one homogenously branched ethylene polymer. As set forth above, this feature is not obvious in view of Kjellqvist and therefore for at least this reason the instant rejection of Claim 21-30 and 54 should be withdrawn.

CONCLUSION

In view of the foregoing Amendments and Remarks, it is respectfully asserted that the rejections set forth in the Office Action of September 22, 2006 have been overcome and that the application is in condition for allowance. Therefore, Applicant respectfully seeks notification of same.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

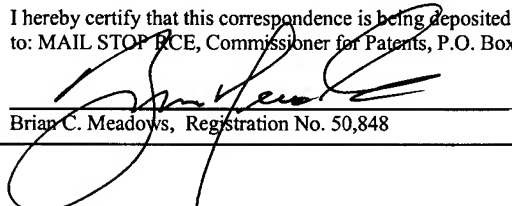


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Date